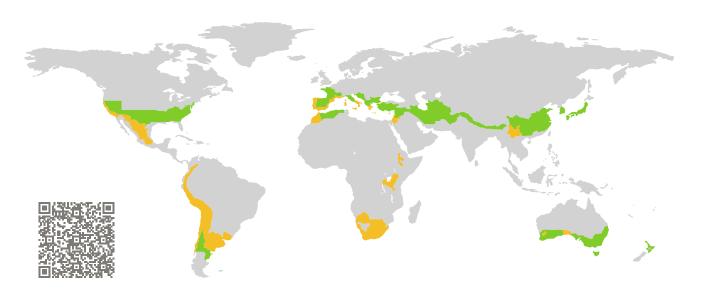
# **CERTIFICATE**

**Certified Passive House Component** 

Component-ID 1508sp04 valid until 31st December 2025

Passive House Institute Dr. Wolfgang Feist 64283 Darmstadt Germany



Category: Spacer for low-E-glazing

Manufacturer: ROLLTECH A/S,

Hjorring, Denmark

Product name: CHROMATECH plus

# This certificate was awarded based on the following criteria:

Depending on the climatic region, the spacer prevents high surface temperatures, which can cause mould. At least 3 out of the 7 reference frames fulfilled the spacer hygiene criteria for the relevant climatic region.

Hygiene  $f_{Rsi} \ge 0.65$ 

The specific resistance of the spacer's edges is greater than the climate-independent minimum requirement.

Efficiency  $R_E = 2.20 \,\mathrm{m}\,\mathrm{K/W} \ge 1.50 \,\mathrm{m}\,\mathrm{K/W}$ 

Type

Stainless steel

Height Box 2

7.00 mm

conductivity Box 2

 $0.610 \, W/(m \, K)$ 





#### **ROLLTECH A/S**

Johs. E. Rasmussens Vej 12, 9800 Hjorring, Denmark

### **Description**

Spacer Bar in stainless steel (0.15 mm).

Spacer height: 7.00 mm

Thermal conductivity: 0.610 W/(m K) (WA-17/1 measured)

Available spacer widths: 8, 10, 12, 14, 15, 16, 18, 20, 22 and 24 mm

Appropriate secondary seal	Specific edge resistance $R_E$	Efficiency class
Polysulfide	2.20 m K/W	phC
Polyurethane	2.20 m K/W	phC
Silicone	2.30 m K/W	phC

## **Explanation**

Spacers are categorized into different efficiency classes based on the resistance of their edges  $R_E$ . A secondary polysulfide sealant is typically used, unless the spacer is not approved for polysulfide. A detailed report with the calculations is available from either the manufacturer or the Passive House Institute.

The Passive House Institute has defined global component requirements for seven climate regions. In principle, components that have been certified for climates with higher requirements can also be used in climates with lower requirements. This may be economically advantageous.

#### Use in PHPP:

If individually calculated values are not available then the thermal bridge loss coefficient specified in this document can be used. In this case, the appropriate reference frame must be selected and a 10% safety margin should be applied.

Further information regarding certification is available on www.passivehouse.com and www.passipedia.org .

Reference frames calculated with Polysulfide						
Climate	Arctic	Cool	Cool temperate	Warm temperate	Warm√	
Glass	Quadruple	Triple	Triple	Triple	Double	
Glass package	4/12/3/12/3/12/4	6/18/2/18/6	6/16/6/16/6	6/16/6/16/6	6/16/6	
Glass U-value	$0.35W/(m^2K)$	$0.52W/(m^2K)$	$0.70  W/(m^2  K)$	$0.70W/(m^2K)$	1.20 W/(m <sup>2</sup> K)	
Timber-aluminium integral frame						
$U_f$ [W/(m <sup>2</sup> K)]	0.48	0.62	0.73	0.87	1.03	
$\Psi_g$ [W/(m K)]	0.049	0.053	0.050	0.049	0.053	
f <sub>Rsi</sub> [-]	0.74	0.70	0.66	0.65	0.55	
Timber-aluminium	[ ]		<u> </u>			
$U_f$ [W/(m <sup>2</sup> K)]	0.54	0.57	0.75	0.97	1.19	
$\Psi_g$ [W/(m K)]	0.053	0.057	0.056	0.054	0.059	
f <sub>Rsi</sub> [-]	0.69	0.66	0.63	0.60	0.48	
Timber						
$U_f$ [W/(m <sup>2</sup> K)]	0.51	0.53	0.78	0.86	0.99	
$\Psi_g$ [W/(m K)]	0.045	0.052	0.050	0.049	0.052	
f <sub>Rsi</sub> [-]	0.72	0.70	0.68	0.68	0.58	
Vinyl						
$U_f$ [W/(m <sup>2</sup> K)]	0.70	0.75	0.82	1.02	1.16	
$\Psi_g$ [W/(m K)]	0.053	0.057	0.057	0.057	0.060	
f <sub>Rsi</sub> [-]	0.72	0.70	0.67	0.67	0.56	
Aluminium						
$U_f$ [W/(m <sup>2</sup> K)]	0.60	0.61	0.71	0.73	1.17	
$\Psi_g$ [W/(m K)]	0.058	0.066	0.065	0.065	0.069	
f <sub>Rsi</sub> [-]	0.73	0.73	0.70	0.70	0.57	
Curtain wall timber	[ <b>=</b>	[ <b>g</b>	Total	<b>1</b>	p-a	
$U_f$ [W/(m <sup>2</sup> K)]	0.60	0.65	0.66	0.71	1.11	
$\Psi_g$ [W/(m K)]	0.072	0.072	0.074	0.073	0.084	
f <sub>Rsi</sub> [-]	0.65	0.65	0.62	0.62	0.49	
Curtain wall aluminium	<u>;</u>	D 3	t of	<b>**</b> 3		
$U_f$ [W/(m <sup>2</sup> K)]	0.67	0.73	0.73	0.79	1.33	
$\Psi_g$ [W/(m K)] $f_{Rsi}$ [-]	0.087 0.75	0.087 0.74	0.090 0.72	0.090 0.71 🗸	0.115 0.59 🗸	
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